

**CLAIMS :-**

1. A printhead assembly for an inkjet printer, the printhead assembly comprising:  
a plurality of printhead modules;  
a support member with a first component and a second component, the first  
5 component adapted for mounting the printhead assembly within an inkjet printer, and the  
second component adapted to mount the printhead modules, the second component having  
a coefficient of thermal expansion closer to that of the printhead modules than the first  
component; wherein,  
the first component is bonded to the second component via intermediate resilient  
10 material; such that,  
the first component can expand more than the second component.
2. A printhead assembly according to claim 1 wherein the support member is a beam  
and the printhead modules include MEMS manufactured chips having at least one fiducial  
on each;  
15 wherein,  
the fiducials are used to misalign the printhead modules by a distance calculated  
from:
  - i) the difference between the coefficient of thermal expansion of the beam and  
the printhead chips;
  - 20 ii) the spacing of the printhead chips along the beam; and,
  - iii) the difference between the production temperature and the operating  
temperature.

3. A printhead assembly according to claim 2 wherein the first component of the beam is an outer metal shell, and the second component of the beam is a core of silicon with the outer metal shell.
4. A printhead assembly according to claim 3 wherein the elastomeric material is an  
5 elastomeric layer interposed between the silicon core and metal shell.
5. A printhead assembly according to claim 3 wherein the outer shell is formed from laminated layers of at least two different metals.
6. A printhead assembly according to claim 1 wherein the printhead is a pagewidth printhead for printing across the width of a page simultaneously.